

## CLAIMS

I claim:

1. An apparatus comprising

an image projection lighting device comprising:

a base; a yoke;

a lamp housing;

the lamp housing comprising

a lamp,

and a first light valve;

a communications port;

a processing system;

a memory;

wherein a cutoff value representing an amount of accumulated operating time at which the lamp may begin to operate improperly is stored in the memory;

wherein an accumulated value representing an actual accumulated amount of operating time of the lamp is stored in the memory;

wherein the processing system prevents the lamp from operating when the accumulated value is within a limit of the cutoff value, unless the processing system grants a request for a variance;

wherein when the processing system grants a request for a first variance, the processing system allows the lamp to operate after the accumulated value is within the limit of the cutoff value.

2. The apparatus of claim 1

wherein when the processing system grants the request for the first variance, the processing system allows the lamp to operate for a first predetermined time.

3. The apparatus of claim 1 further comprising;

a stand alone control system;

and wherein the request for a variance is entered by an operator by using the stand alone control system.

4. The apparatus of claim 3 wherein

the stand alone control system displays a message indicating that the request for the first variance has been granted by the processing system.

5. The apparatus of claim 1 further comprising

a central controller; and

wherein a variance can be requested by an operator of the central controller.

6. The apparatus of claim 5 wherein

the central controller displays a message indicating that the request for the first variance has been granted.

7. The apparatus of claim 2 further comprising

wherein when the processing system grants a request for a second variance the processing system allows the lamp to operate for a second predetermined period of time after the accumulated value is within the limit of the cutoff value.

8. A lighting system comprising

a plurality of image projection lighting devices;  
and a central controller;  
wherein each of the image projection lighting devices comprises:  
a base;  
a yoke;  
a lamp housing;  
the lamp housing comprising  
a lamp,  
and a first light valve;  
a communications port;  
a processing system; and  
a memory, wherein an accumulated value representing an accumulated amount  
of operating time of the lamp is stored in the memory;  
and wherein a lamp life warning regarding any of the lamps of any of the plurality  
of image projection lighting devices is sent to the central controller to the attention of an  
operator without operator inquiry.

9. A method comprising

storing, in a memory of an image projection lighting device, a cutoff value  
representing an amount of accumulated operating time at which a lamp of the image  
projection lighting device may begin to operate improperly;

storing, in the memory, an accumulated value representing an actual  
accumulated amount of operating time of the lamp;

preventing the lamp from operating when the accumulated value is within a limit  
of the cutoff value, unless the processing system grants a request for a variance.

10. The method of claim 9 wherein

when a request for a first variance is granted, allowing the lamp to operate after the accumulated value is within the limit of the cutoff value but before the accumulated value is greater than or equal to the cutoff value.

11. The method of claim 9

wherein when the request for the first variance is granted, allowing the lamp to operate for a first predetermined time.

12. The method of claim 9 further comprising

entering a request for a variance by using a stand alone control system.

13. The method of claim 12 further comprising

displaying a message indicating that the request for the variance has been granted.

14. The method of claim 9 wherein

the request for a variance is entered by an operator of a central controller.

15. The method of claim 14 wherein

the central controller displays a message indicating that the request for the first variance has been granted.

16. A method comprising:

storing, in memory of a first image projection lighting device, an accumulated value representing an actual accumulated amount of operating time of a first lamp of the first image projection lighting device;

storing, in memory of a second image projection lighting device, an accumulated value representing an actual accumulated amount of operating time of a second lamp of a second image projection lighting device; and

sending a warning regarding either the first lamp or the second lamp to a central controller to the attention of an operator without operator inquiry;

and wherein the warning indicates that the first lamp or the second lamp has been operating for an accumulated amount of time, which is within a limit of a cutoff amount of time at which the first lamp or the second lamp may function improperly.

17. The method of claim 16 further comprising

comparing the accumulated value of the first image projection lighting device to a first cutoff point value stored in the memory of the first image projection lighting device;

comparing the accumulated value of the second image projection lighting device to a second cutoff point value stored in the memory of the second image projection lighting device;

prohibiting the operation of the lamp of the first image projection lighting device or the second image projection lighting device based upon the accumulated value of the first image projection lighting device or the accumulated value of the second image projection lighting device, respectively;

allowing the operator to use the central controller to request a variance, that allows further operation of either the first lamp of the first image projection lighting device or the second lamp of the second image projection lighting device.